

IN THE CLAIMS

Please add new claims 17-19. Please amend claims 1, 8 and 11-14 as follows. The following listing of claims replaces all prior versions and listings of claims in this application.

1. (currently amended) A method for indexing data items in a database, the method comprising:

retrieving data items from a database;

producing a primary index of the data items;

mapping the data items on to at least a first tier and a second tier based on respective rankings of the data items;

producing at least a first and a second sub-index from the primary index based on the mapping; and

storing the ~~at least a first and second~~ sub-index in ~~different search nodes~~, a first plurality of search nodes logically arranged in a first plurality of columns; and

storing the second sub-index in a second plurality of search nodes logically arranged in a second plurality of columns.

2. (original) The method as recited in claim 1, wherein the database is a collection of pages and documents available through the World Wide Web.

3. (original) The method as recited in claim 1, wherein the mapping is based on a static relevance score of the data items.

4. (original) The method as recited in claim 1, further comprising:
executing a search query log for a number of queries on the database; and
receiving the results of the search query log;
wherein the first sub-index is based on the results of the query log.

5. (original) The method as recited in claim 3, further comprising:
executing a search query log for a number of queries on the database; and
receiving the results of the search query log;
wherein the first sub-index is based on the results of the query log.

6. (original) The method as recited in claim 1, wherein the mapping is based on a value context of the data items.

7. (original) The method as recited in claim 1, wherein the data items are web pages and mapping is based on a relevance score of the web pages.

8. (currently amended) A method for searching a database, the method comprising:
retrieving data items from a database;
producing a primary index of the data items;
mapping data items on to at least a first tier and a second tier based on respective rankings of the data items;
producing at least a first and a second sub-index from the primary index based on the mapping;

storing the ~~at least a first and second~~ sub-index in ~~different search nodes; a first plurality of search nodes logically arranged in a first plurality of columns;~~
~~storing the second sub-index in a second plurality of search nodes logically arranged in a second plurality of columns;~~
receiving a search query; and
searching the first tier for result data items relating to the search query.

9. (original) The method as recited in claim 8, further comprising:
searching the second tier for the result data items relating to the search query when the first tier does not yield a threshold number of result data items.
10. (original) The method as recited in claim 8, wherein the second tier is searched when the first tier does not yield a threshold number of result data items.

11. (currently amended) A system for indexing a database, the system comprising:
a crawler which crawls the database to find data items;
an indexer which receives the data items and produces a primary index;
a document mapping section which maps data items on to at least a first and a second tier based on respective rankings of the data items;
a processor which produces at least a first and a second sub-index from the primary index based on the mapping;
~~a first search node which stores plurality of search nodes logically arranged in a first plurality of columns for storing the first sub-index; and~~

a second ~~search node which stores~~ plurality of search nodes logically arranged in a second plurality of columns for storing the second sub-index.

12. (currently amended) A search node cluster for enabling a search of a database using an index of information stored therein, the cluster comprising:

search nodes logically arranged in a plurality of columns and plurality of rows;

all search nodes in any one of the columns including substantially the same sub-indexes of information;

all search nodes in any one of the rows including distinct sub-indexes of information;

the search nodes in the rows being logically divided into at least a first and a second tier;

the search nodes in the first tier including ~~an index~~ sub-indexes for a first portion of the database; and

the search nodes in the second tier including ~~an index~~ sub-indexes for a second portion of the database; wherein

the data in the first and second tier is based on respective rankings of the information in the first and second portion of the database.

13. (currently amended) A search engine comprising:

a crawler which crawls a database to find data items;

an indexer which receives the data items and produces a primary index;

a document mapping section which maps data items on to at least a first and a second tier based on respective rankings of the data items;

a processor which produces at least a first and a second sub-index from the primary index based on the mapping;

a first ~~search node which stores~~ plurality of search nodes logically arranged in a first plurality of columns for storing the first sub-index;

a second ~~search node which stores~~ plurality of search nodes logically arranged in a second plurality of columns for storing the second sub-index; and

a dispatch which receives a query and forwards the query to ~~the first~~ a search node in the first plurality of search nodes.

14. (currently amended) The search engine as recited in claim 13, wherein ~~the first sub index is stored in a first plurality of search nodes logically arranged in a first plurality of columns; and the second sub index is stored in a second plurality of search nodes logically arranged in a second plurality of columns so that the first and second sub-index are further~~ logically arranged in a respective plurality of logical rows.

15. (original) The search engine as recited in claim 13, wherein the dispatch sends the query to the second tier when the first tier did not produce a thresholds number of result data items.

16. (original) The search engine as recited in claim 13, wherein the dispatcher sends the query to the second tier when the first tier does not yield a threshold number of result data items.

17. (new) The method of claim 1, wherein the first and second sub-index are logically arranged in a respective plurality of logical rows.

18. (new) The method of claim 8, wherein the first and second sub-index are logically arranged in a respective plurality of logical rows.

19. (new) The system of claim 11, wherein the first and second sub-index are logically arranged in a respective plurality of logical rows.